## Subpart B—Test Procedures and Materials Incorporated

## §431.21 Purpose and scope.

This subpart contains test procedures for electric motors, required to be prescribed by DOE pursuant to section 343 of EPCA, 42 U.S.C. 6314, and identifies materials incorporated by reference in this Part.

## §431.22 Reference sources.

- (a) Materials incorporated by reference. (1) General. The following standards which are not otherwise set forth in this part 431 are incorporated by reference. The material listed in paragraph (a)(2) of this section has been approved for incorporation by reference by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR Part 51. Any subsequent amendment to a standard by the standardsetting organization will not affect the DOE test procedures unless and until amended by DOE. Material is incorporated as it exists on the date of the approval and a notice of any change in the material will be published in the FEDERAL REGISTER.
- (2) List of standards incorporated by reference. (i) The following provisions of National Electrical Manufacturers Association Standards Publication MG1-1993, Motors and Generators, with Revisions 1, 2, 3 and 4:
- (A) Section I, General Standards Applying to All Machines, Part 1, Referenced Standards and Definitions, paragraphs 1.16.1, 1.16.1.1, 1.17.1.1, 1.17.1.2, and 1.40.1;
- (B) Section I, General Standards Applying to All Machines, Part 4, Dimensions, Tolerances, and Mounting, paragraph 4.01 and Figures 4-1, 4-2, 4-3, and 4-4:
- (C) Section II, Small (Fractional) and Medium (Integral) Machines, Part 11, Dimensions-AC and DC Small and Medium Machines, paragraphs 11.01.2, 11.31 (except the lines for frames 447T, 447TS, 449T and 449TS), 11.32, 11.34 (except the line for frames 447TC and 449TC, and the line for frames 447TSC and 449TSC), 11.35, and 11.36 (except the line for frames 447TD and 449TD, and the line for frames 447TD and 449TD, and the line for frames 447TSD and 449TSD), and Table 11-1;

- (D) Section II, Small (Fractional) and Medium (Integral) Machines, Part 12, Tests and Performance-AC and DC Motors, paragraphs 12.35.1, 12.35.5, 12.38.1, 12.39.1, and 12.40.1, 12.58.1, and Tables 12-2 and 12-8; and
- (E) Section II, Small (Fractional) and Medium (Integral) Machines, Part 14, Application Data-AC and DC Small and Medium Machines, paragraphs 14.02 and 14.03.
- (ii) Institute of Electrical and Electronics Engineers, Inc., Standard 112-1996, Test Procedure for Polyphase Induction Motors and Generators, Test Method B, and the correction to the calculation at item (28) in section 10.2 Form B-Test Method B issued by IEEE on January 20, 1998. (Note: Paragraph 2 of Appendix A to Subpart B of Part 431 sets forth modifications to this Standard when it is used for purposes of Part 431 and EPCA.)
- (iii) CSA International Standard C390–93, Energy Efficiency Test Methods for Three-Phase Induction Motors, Test Method (1).
- (iv) International Electrotechnical Commission Standard 60034-1 (1996), *Rotating electrical machines*, Part 1: *Rating and performance*, with Amendment 1 (1997), Section 3: Duty, clause 3.2.1 and figure 1.
- (v) International Electrotechnical Commission Standard 60050–411 (1996), International Electrotechnical Vocabulary Chapter 411: Rotating machines, sections 411–33–07 and 411–37–26.
- (vi) International Electrotechnical Commission Standard 60072-1 (1991), *Dimensions and output series for rotating electrical machines—Part 1: Frame numbers 56 to 400 and flange numbers 55 to 1080*, clauses 2, 3, 4.1, 6.1, 7, and 10, and Tables 1, 2 and 4.
- (vii) International Electrotechnical Commission Standard 60034-12 (1980), Rotating electrical machines, Part 12: Starting performance of single-speed three-phase cage induction motors for voltages up to and including 660 V, with Amendment 1 (1992) and Amendment 2 (1995), clauses 1, 2, 3.1, 4, 5, and 6, and Tables I, II, and III.
- (3) Inspection of standards. The standards incorporated by reference are available for inspection at: